



# Auto Body Restoration and Painting

## *A Success Story in Waste Reduction*

*1992 Governor's  
Award Winner for  
small business*

*The company believed  
that business success  
and a clean, healthy  
working environment  
were related.*

*"Our first concern  
was about company  
liability"*

*Less toxic paints are  
used whenever possible.*

*Recycling solvents  
on-site resulted in  
reduced liability and a  
savings of \$4,800 per  
year in waste  
management costs.*

### **K.D. Auto Body, Inc.**

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K.D. Auto Body, Inc. is a family-owned auto body repair shop which currently employs 17 people, and specializes in auto body restoration and painting. The shop began in 1986 with just two employees.

In 1992, owner Roger Squire was presented with the Governor's Award for small business for Outstanding Achievement in Pollution Prevention in recognition of exceptional initiative in reducing and recycling hazardous waste.

The driving force for this company's search for better ways to operate an auto body shop comes from a commitment to reduce the company's liability, improve worker health and safety conditions in the shop, and a desire to stay one step ahead of the regulations. Management shared the belief that the company would prosper if they did these things well.

As K.D. Auto Body grew, so did their waste volume. The company was not only concerned about the dangerous waste generated, but equally concerned about liability for sending non-dangerous wastes to the local landfill. In an effort to reduce the liability, they looked for ways to reduce the volume and toxicity of both the solid waste and the dangerous waste they generated.

The first step was to look at what was going into the dumpster and what was being sent off-site as dangerous waste. They discovered that paint filters, used to filter overspray from primer paints, contained sufficient cadmium, lead, and chrome to make them dangerous waste. They discontinued the use of yellow-based sealers which contain high concentrations of lead and chromium, and began using gray-based sealers with lower lead and chromium concentrations.

Prior to 1988, all spent solvent (lacquer thinner) was sent off-site as dangerous waste. A still was purchased to reclaim solvents on-site. Spent solvent sent off-site for treatment or disposal has been reduced by approximately 80%. Annual savings are estimated to be some \$4,800 per year.

The pay-back period for the still was less than one year.

K.D. Auto Body was also concerned about the liability of sending paint cans to the local landfill. They stopped using cans to mix paint and began using freezer jars which could be rinsed and reused.

*Waste reduction doesn't  
have to cost money.*

*"We wanted to create a  
work environment which  
was conducive to healthy  
lungs and long term  
employment."*

*The volume of masking  
paper has been reduced  
significantly by using  
liquid spray mask.*

*"We are still looking for  
additional ways to  
reduce our waste volume  
and toxicity."*

Any discarded paint cans are now rinsed of all residual paint prior to disposal. The use of the freezer jars resulted in an annual savings of more than \$1,000.

Worker health and safety was a big issue with the owner. K.D. was a typical auto body shop—dusty, dirty and with a strong odor of volatile organic compounds (VOC's). As a result of their program, dust in the sanding areas has been reduced by an estimated 80% through the use of an overhead continuous vacuum system which can be connected via hoses to sanding equipment. VOC's in the shop have been reduced through the use of high-volume, low pressure (HVLP) spray guns. The company experimented with 15 different spray guns, looking for maximum transfer efficiency before selecting the right one.

The solid waste stream has also been reduced by instituting recycling of cardboard, metal auto body parts and plastic bumpers, although owner Roger Squire admits that finding someone who will consistently recycle plastic bumpers has been challenging. In addition, the company has significantly reduced masking paper waste by switching to a liquid spray mask which protects painted surfaces, glass, and trim from overspray, and can be washed off with water when the job is finished.

The key to this company's success has been a commitment to stay one step ahead of the regulations, and to provide a healthy and safe environment for the employees. The owner believes that improvements made on environmental issues have also resulted in improved worker conditions, and vice versa. The sum of both efforts has produced a cleaner working environment, which has resulted in higher quality work and greater efficiency, which in turn has attracted more business. The company's growth since 1986 is compelling testimony that waste reduction pays.

This publication has been produced by the Waste Reduction, Recycling and Litter Control Program of the Washington State Department of Ecology. This program, which is non-regulatory, seeks to promote recycling and the prevention of waste through education, technical assistance, and policy development.

A business technical assistance specialist can be reached by calling Ecology's toll-free hotline at 1-800-RECYCLE

